

policy, as set forth in MPEP 803, viz. that "an appropriate explanation" must be advanced by the Examiner as to the existence of a "serious burden" if a restriction were not required. Due to the aforementioned omission, it is respectfully submitted that the requirement for restriction is improper and, consequently, its withdrawal is respectfully requested.

Related to this, the requirement is traversed since there would not appear to be a serious burden to examine applicant's application in total, and for which he has paid the appropriate claim fees. Applicant submits that it would be no serious burden on the Examiner to examine all of the pending claims, because a search for all of the claims in the above identified application, should be made in order to do a complete and thorough search in view of the recognized relationship between the claims of Groups I-III.

For example, the claims of elected Group I are directed to a composition and method for improving the incorporation of a thickener into an aqueous system containing a water insoluble polymer, and the claims of Group II are directed to a process for preparing the composition of claim 1 by dry blending it with the cyclodextrin. Thus, the search for each of the claims of Group I and Group II should include similar, if not the same, art areas. Moreover, the claims of Group III are directed to a paint composition comprising latex and the composition of claim 1, and a search for such paint composition should also include similar, if not the same, art areas.

In view of the foregoing, it is respectfully requested that the Examiner seriously consider the requirement for restriction, and withdraw the same so as to give an examination on the merits on all the claims pending in this application.

The rejection of claims 1-23 and 28-30 as being unpatentable under 35 USC 103(a) over Eisenhart et al. in view of Lau et al. is traversed.

Applicant's invention is directed primarily to a composition comprising a hydrophobically modified polyacetal polyether (HM-PAPE) or comb hydrophobically modified polyacetal polyether and a cyclodextrin viscosity-suppressing agent. Neither Eisenhart nor Lau discloses a method of using a viscosity-suppressing agent with a hydrophobically modified polyacetal polyether or comb polyacetal polyether. It should be noted that the HM-PAPEs were unknown when the Eisenhart and Lau references were granted in 1992 and 1994, respectively. HM-PAPEs of the instant invention are novel materials that were patented in US Patents 5,137,571 and 5,376,709. The Eisenhart and Lau Patents describe the use of cyclodextrin or cyclodextrin derivatives to lower the solution viscosity specifically

in hydrophobically modified polyethoxylated urethane, hydrophobically modified alkali soluble emulsions, hydrophobically modified hydroxyethylcellulose, and hydrophobically modified polyacrylamides. From a scientific standpoint, the efficacy of a given cyclodextrin to lower the viscosity of a given hydrophobically modified polymer depends on several factors. These factors include: a) type of polymer backbone, b) polymer chain length, c) molar mass and the amount of the hydrophobe, d) rigidity and location of the hydrophobe on the polymer backbone, and e) the size and water solubility of a given cyclodextrin.

It is described in the Eisenhart reference (US 5,137,571) in column 5, lines 5-35 that unmodified beta-cyclodextrins were not effective viscosity suppressing additives to make high solids (about 20%) solutions of urethane associative thickeners. Since unmodified cyclodextrins, particularly beta-cyclodextrin, have limited water solubility, they were not effective viscosity suppressants for hydrophobically modified urethane associative thickeners (HM-PUAT). This statement clearly teaches someone skilled in the art that cyclodextrin cannot be used to lower the solution viscosity of high solids (greater than 10%) solutions of hydrophobically modified polymers. Thus, one would have expected that high solids (about 20%) solution of HM-PAPEs could not be made using beta-cyclodextrin.

Contrary to this expectation, the applicant was surprised to find that about 20-25% solution of the HM-PAPEs, having molecular weight comparable to that of the HM-PUAT, and having a pourable viscosity can be made using beta-cyclodextrin. This difference in solution viscosity behavior between HM-PUAT and HM-PAPEs is due to their difference in chemical structure. Note that HM-PUAT claims in the Eisenhart and Lau Patents have hydrophobes as part of the polymer backbone. They also possess urethane linkages, which can undergo hydrogen bonding with cyclodextrins. In contrast, HM-PAPEs do not have hydrophobes or urethane linkages on their backbone. They either have terminal hydrophobes or pendent hydrophobes. This structural feature of HM-PAPEs distinguishes them from other hydrophobically modified water-soluble polymers. Their mode of interactions with cyclodextrin is also different from the HM-PAPEs.

Hence, based on the teachings of the Eisenhart and Lau patents, one skilled in the art could not have predicted the efficacy and utility of cyclodextrins to lower solution viscosity of HM-PAPEs.

It must also be reiterated that the hydrophobically modified polymers disclosed in the Eisenhart and Lau patents are basically urethanes, which would not suggest to a person skilled in art that these polymer could be substituted for HM-PAPE because as noted above

HM-PAPes have a different chemical and physical structure than the polymers of Eisenhart and Lau. Hence, it would not be obvious to a person having an ordinary skill in the art armed with these prior art references to practice applicant's invention. Assuming that the combination suggested by the Examiner could be made, such a combination still would not read on applicant's invention.

Hence, for the reasons set forth above, it is submitted that this application is now in the condition for allowance and prompt notification thereof is respectfully requested.

Respectfully submitted,


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